

FIG. 1

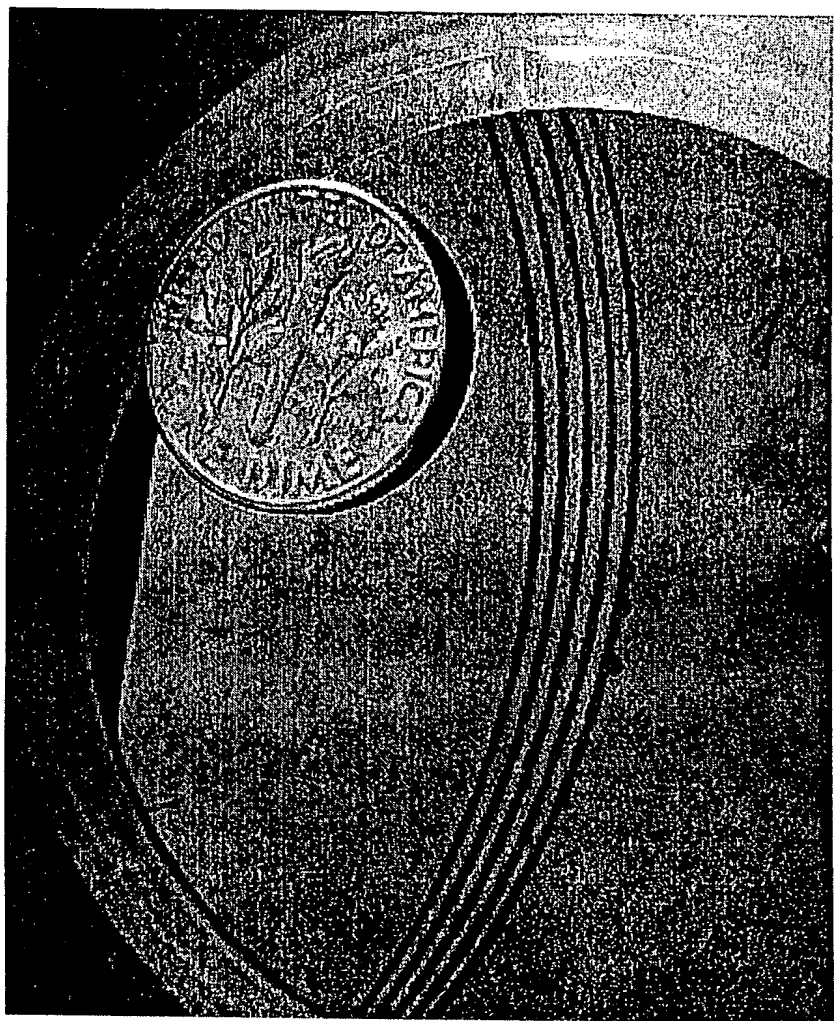


FIG. 2

09703755 110400

09/03/55 110100

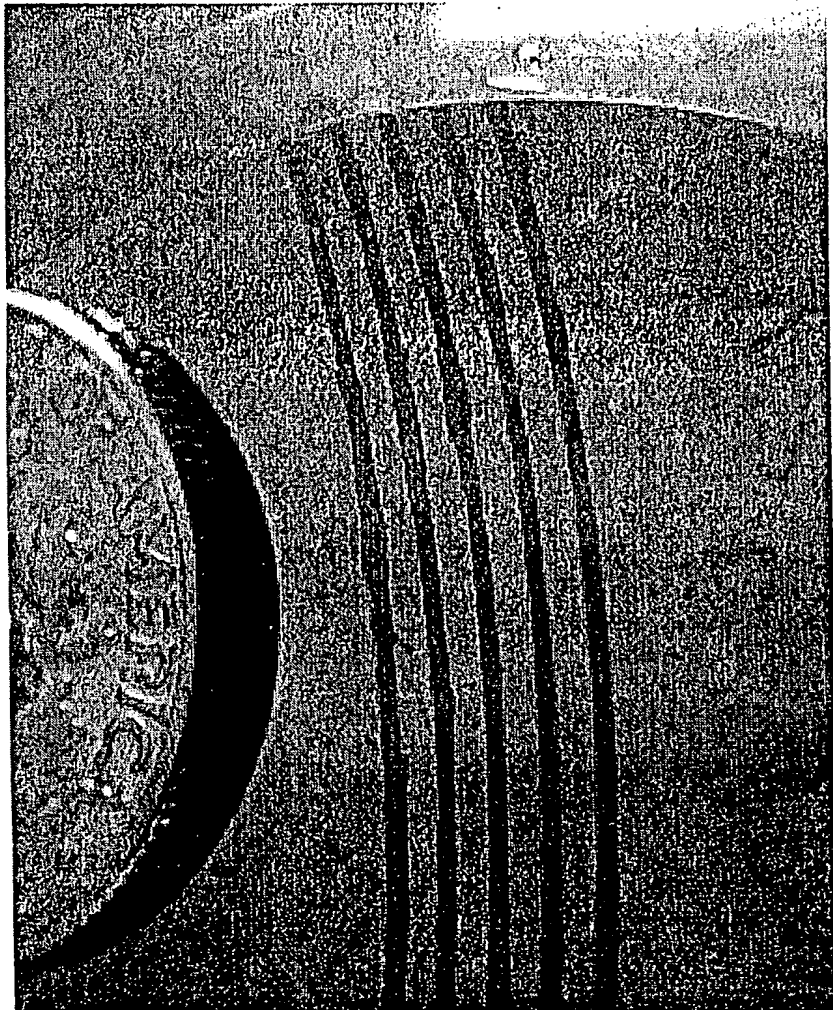


FIG. 3

00000000000000000000

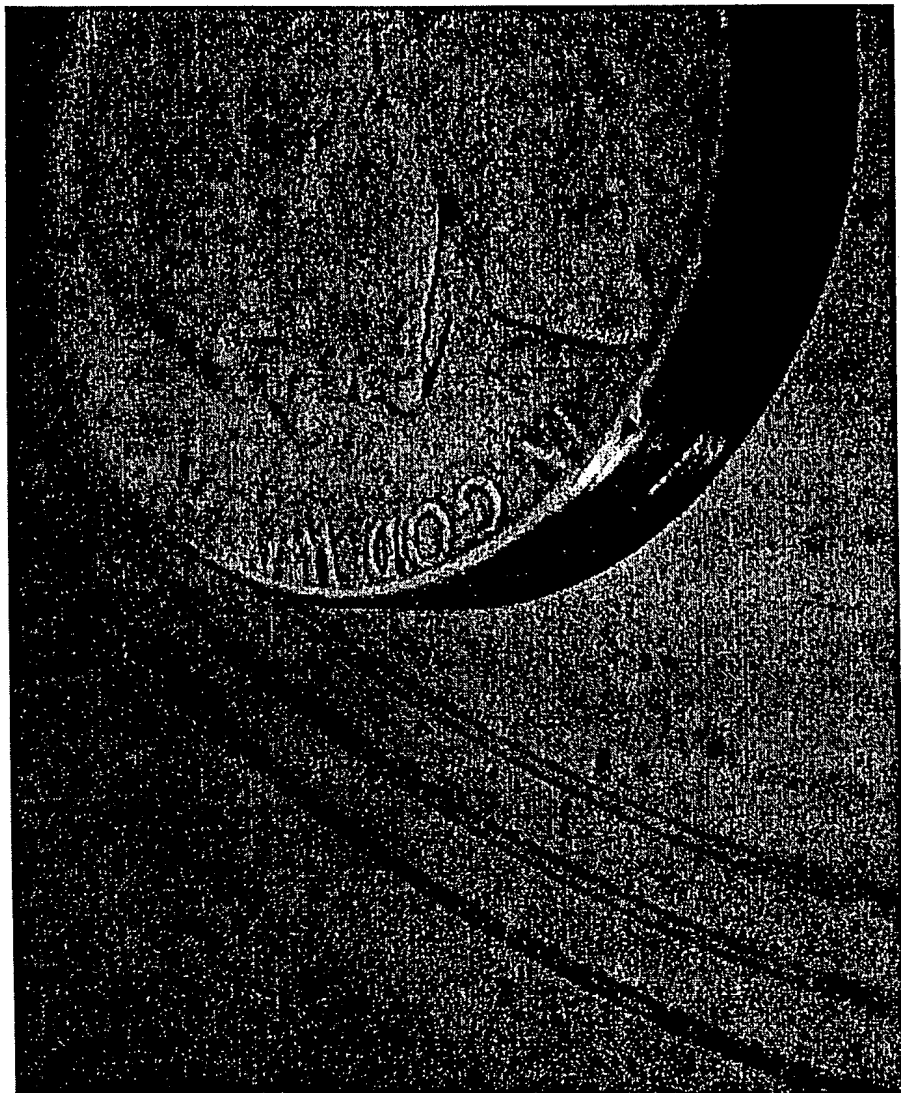


FIG. 4



FIG. 5

09/03/2010 10:10

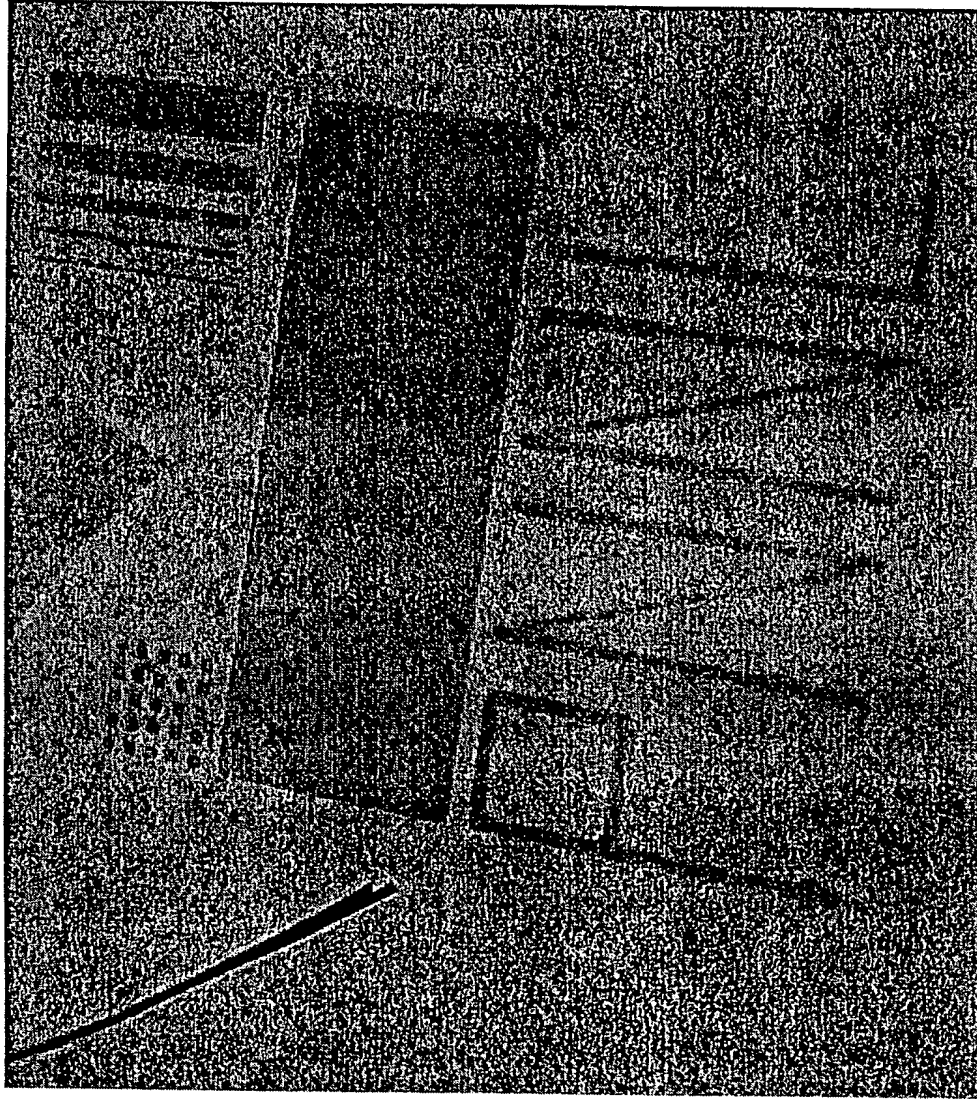


FIG. 6

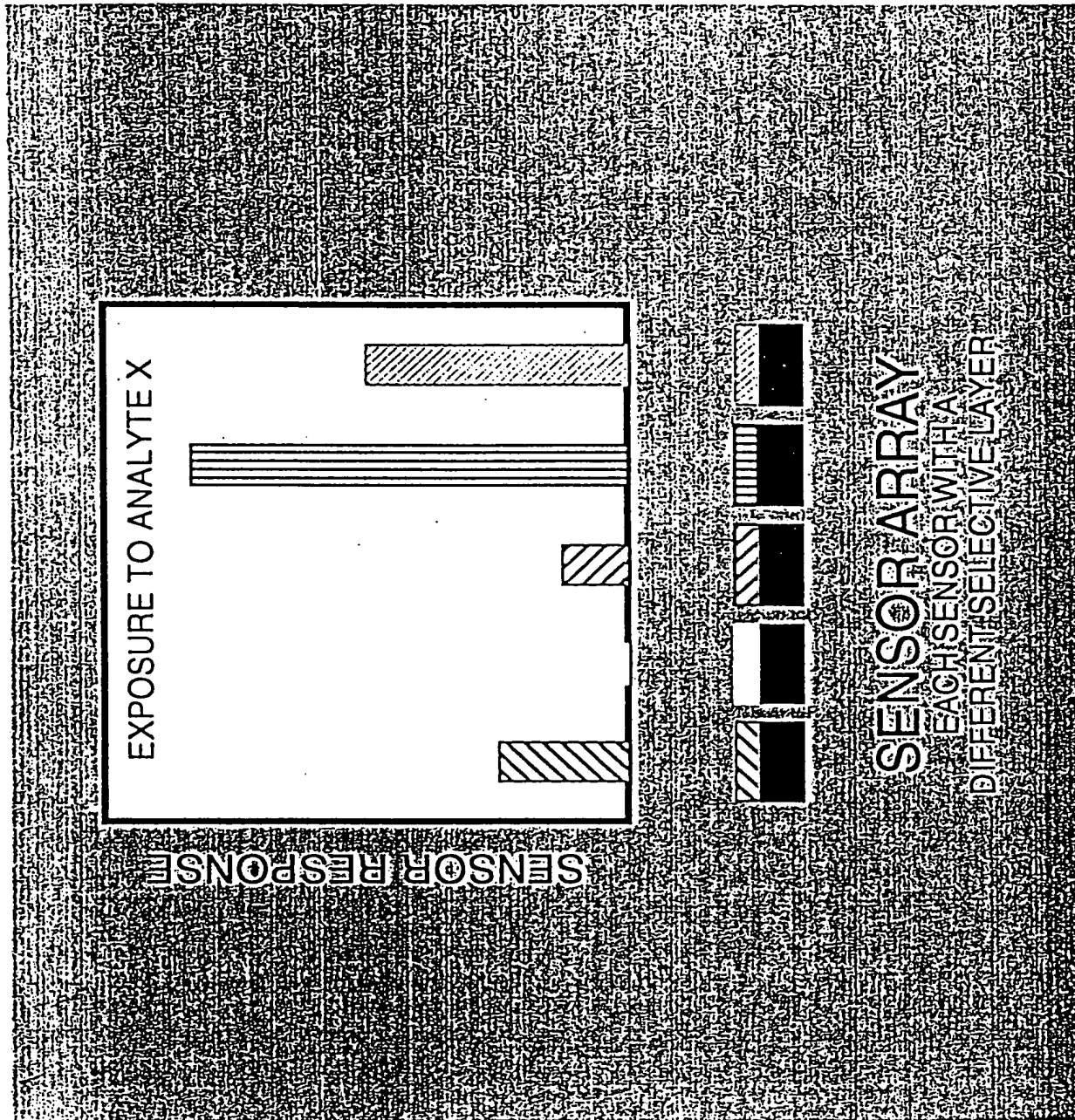


FIG. 7

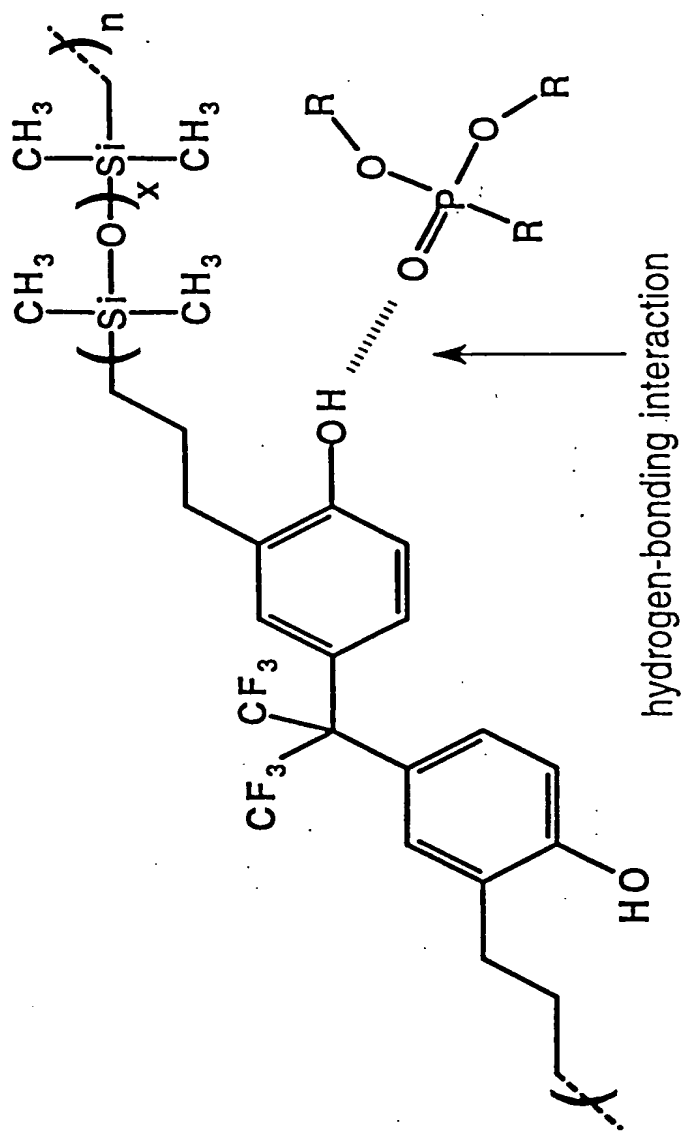
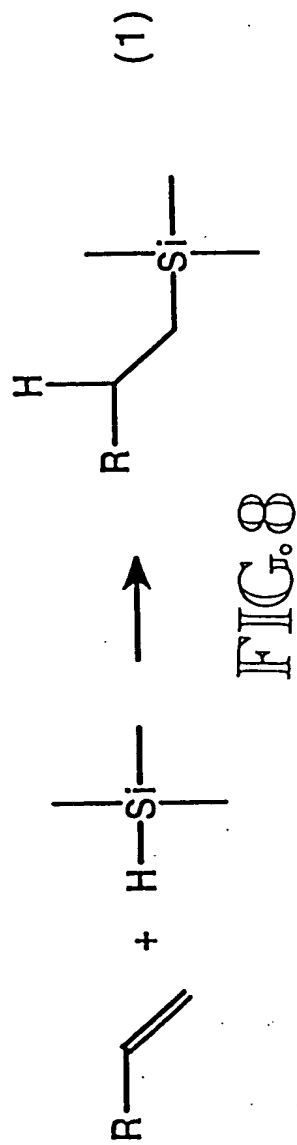


FIG. 12

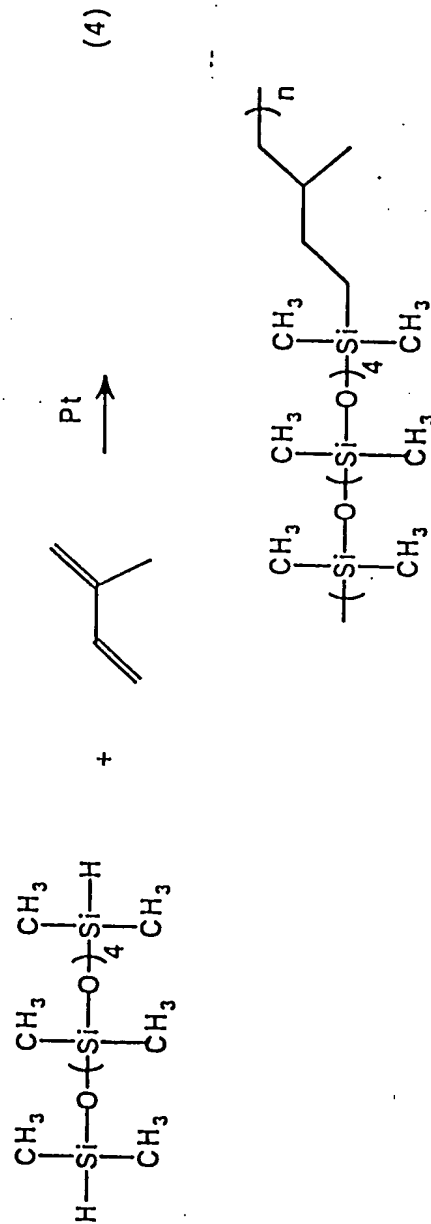
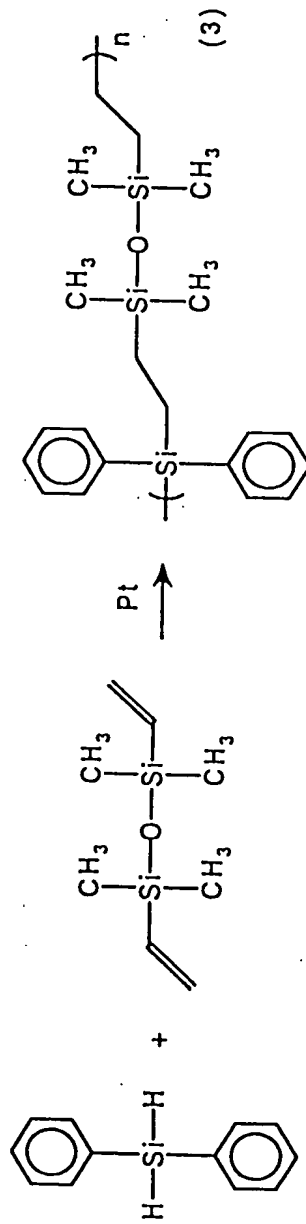
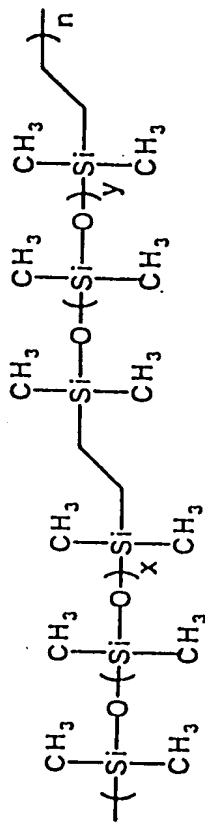
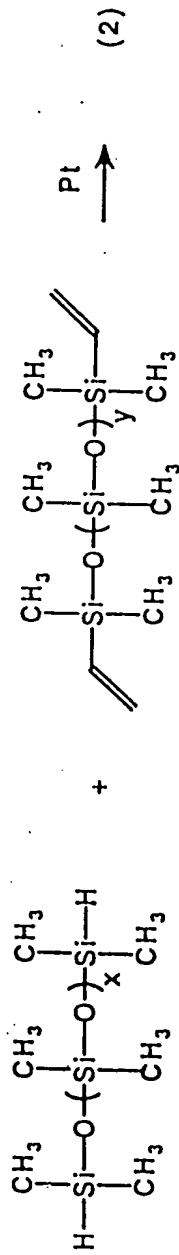
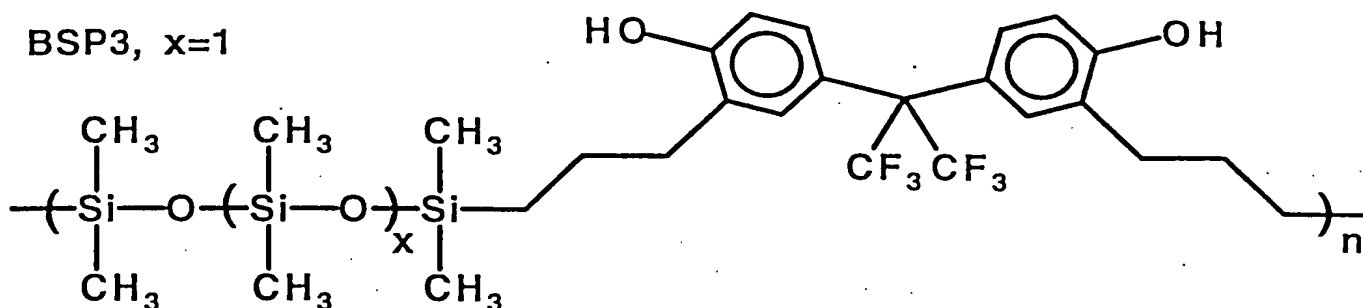


FIG. 9

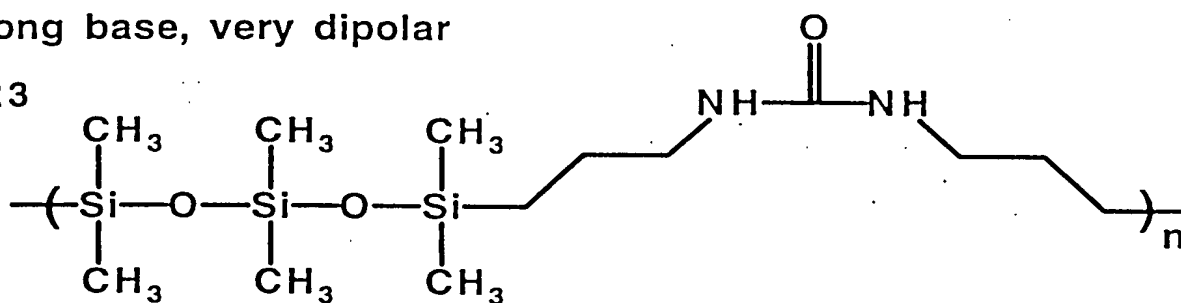
Strong hydrogen bond acid

BSP3, x=1



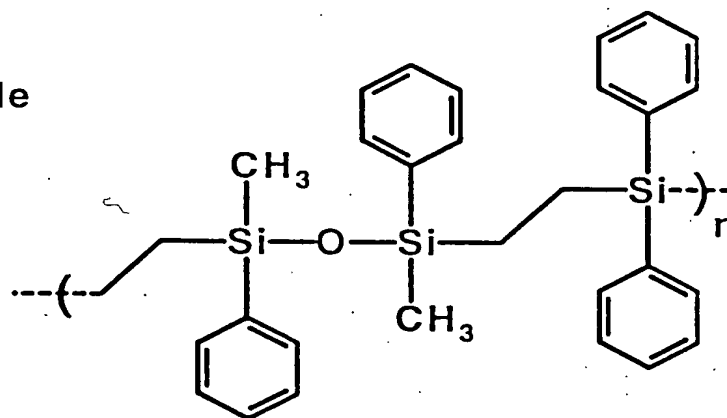
Strong base, very dipolar

UR3



Polarizable

CSPH



Nonpolar

CSME

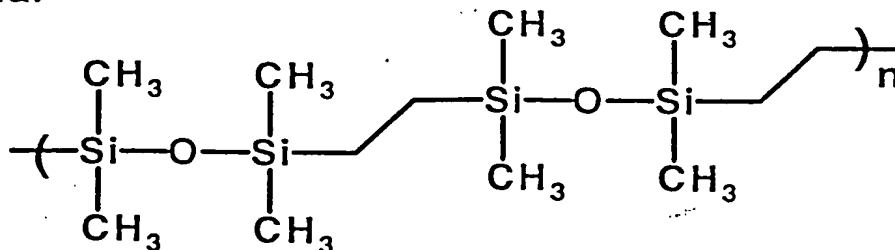
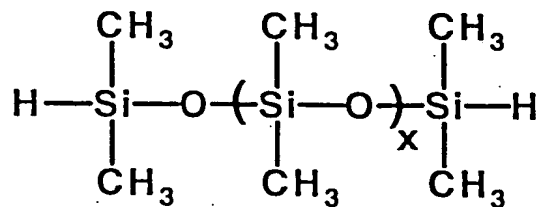
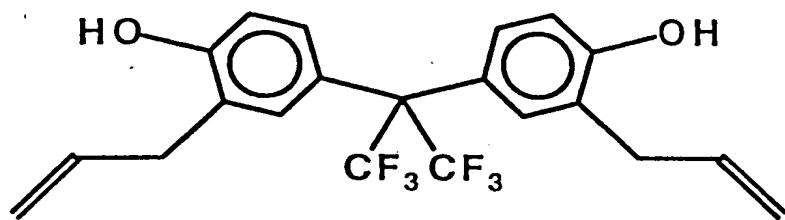


FIG. 10

0377-00460



x = 0,1,4,~80 etc

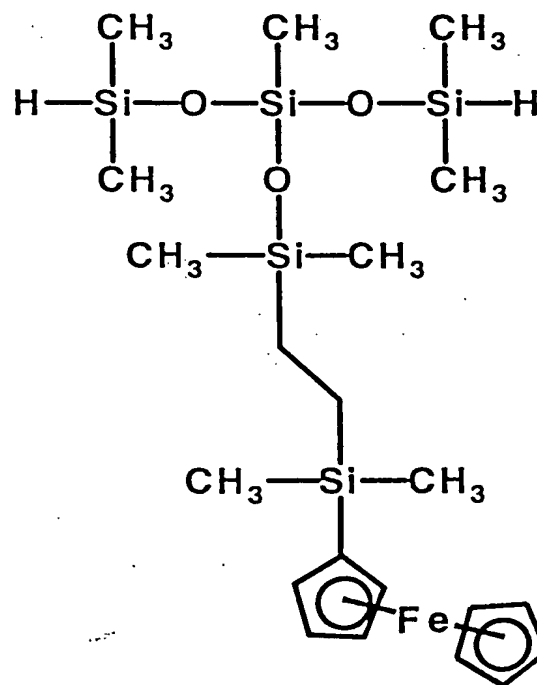
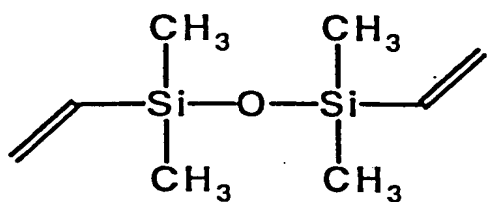
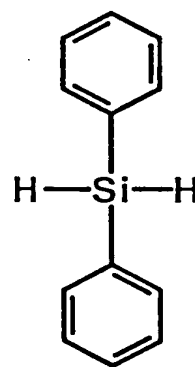
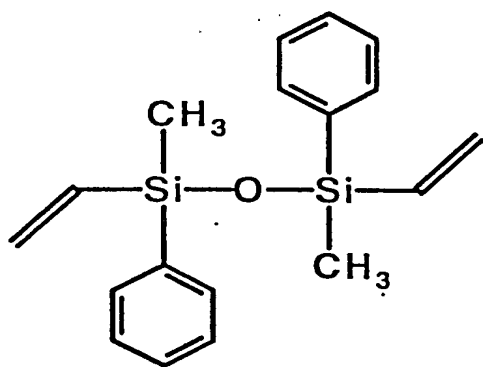
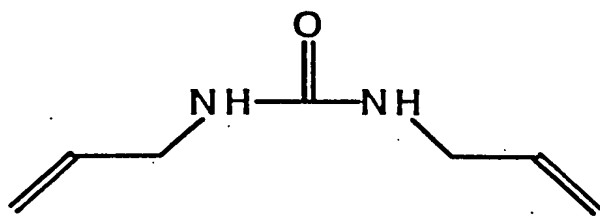


FIG. 11

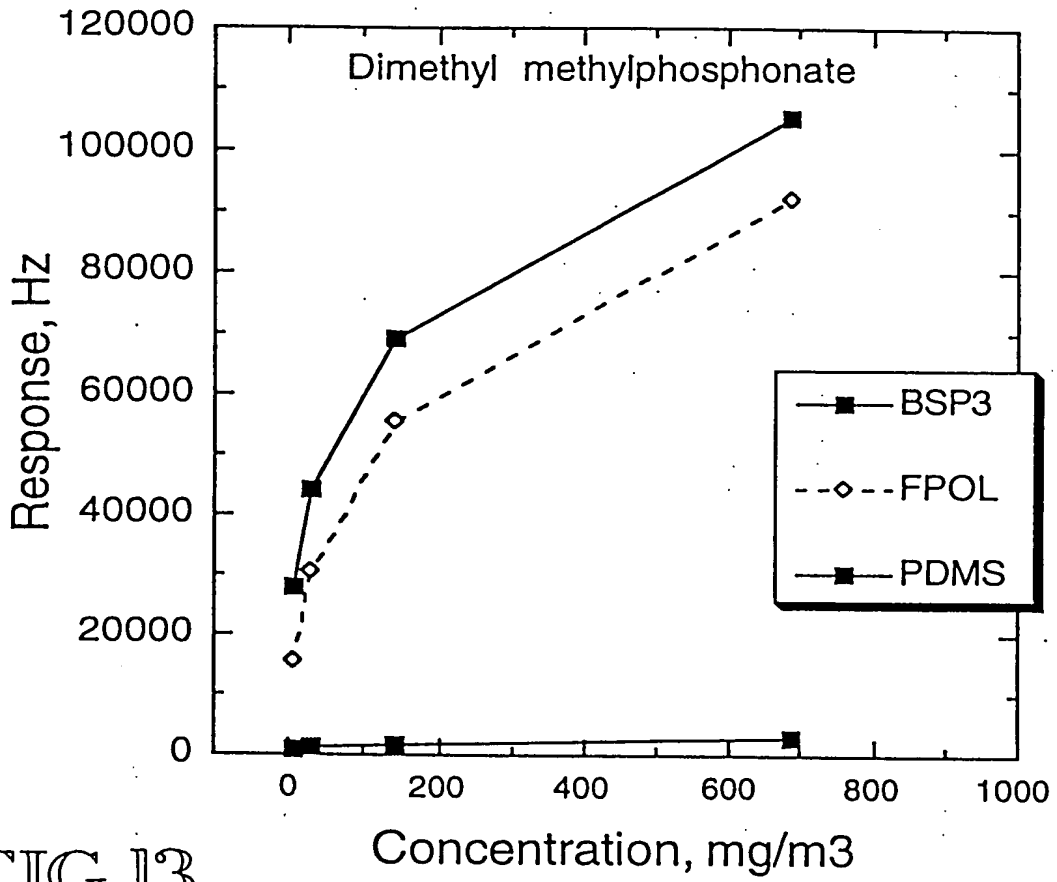


FIG.13

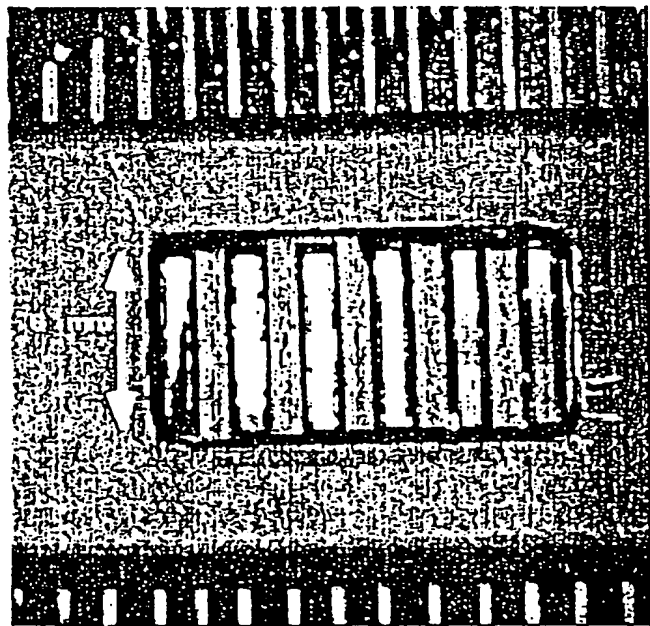


FIG.17

FPW Array-on-a-Chip

REDOX ACTIVE FUNCTIONALIZED POLYMER

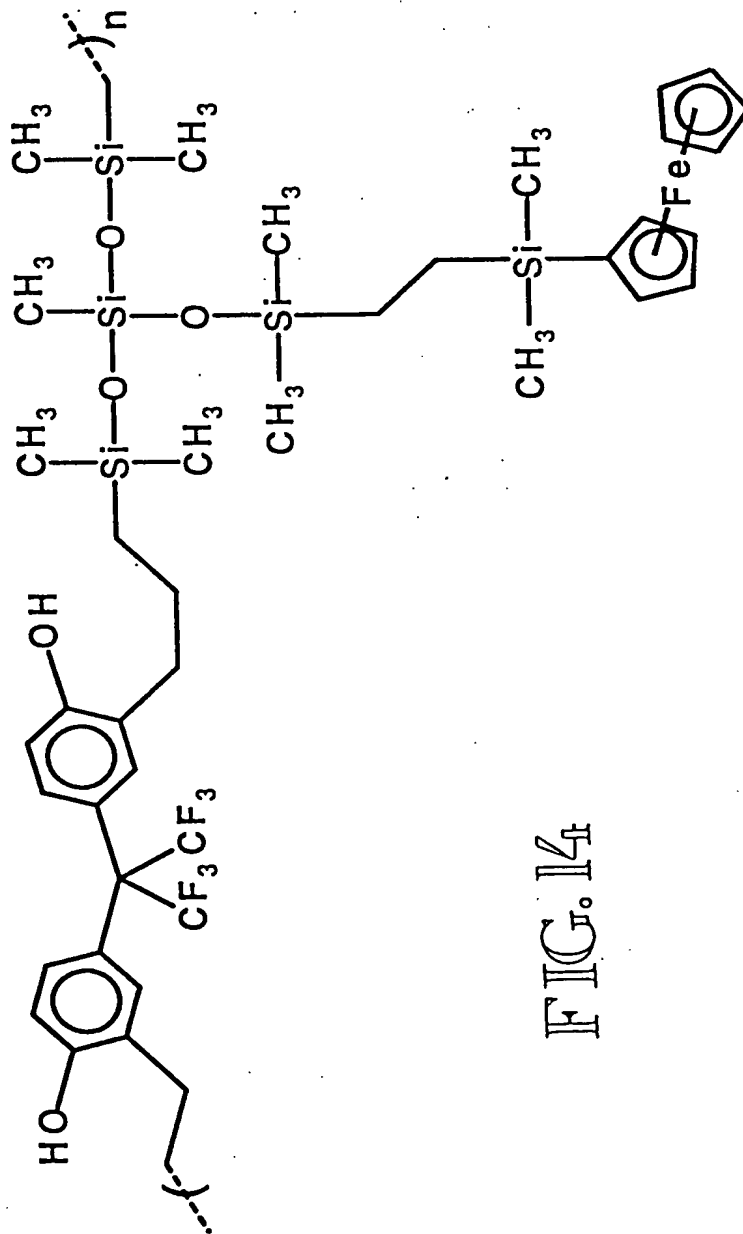
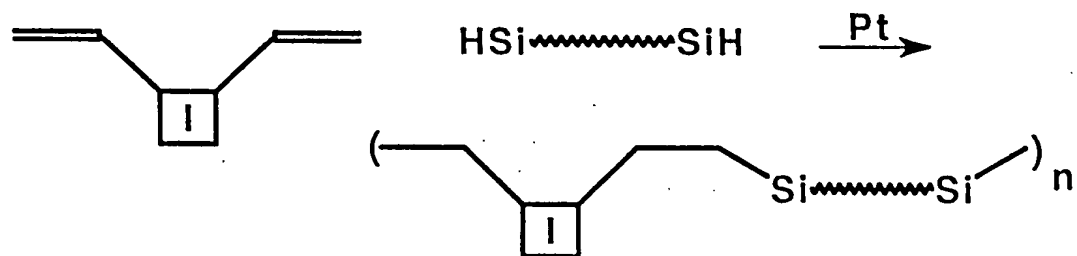
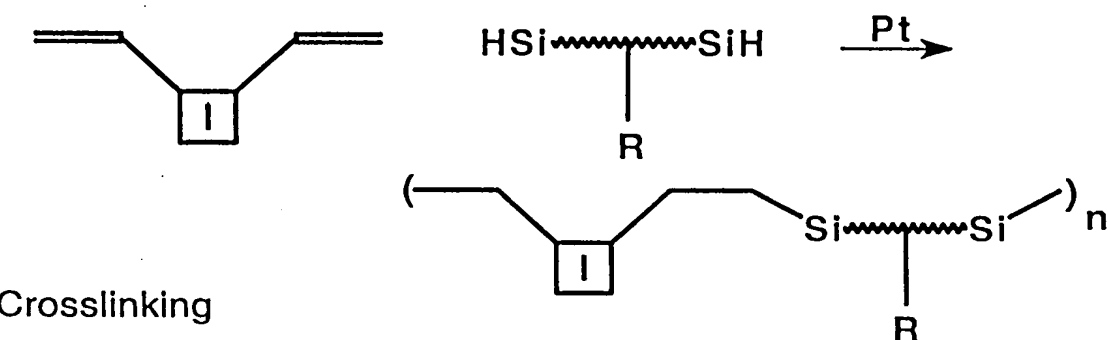


FIG. 14

Synthesis



Crosslinking



Grafting

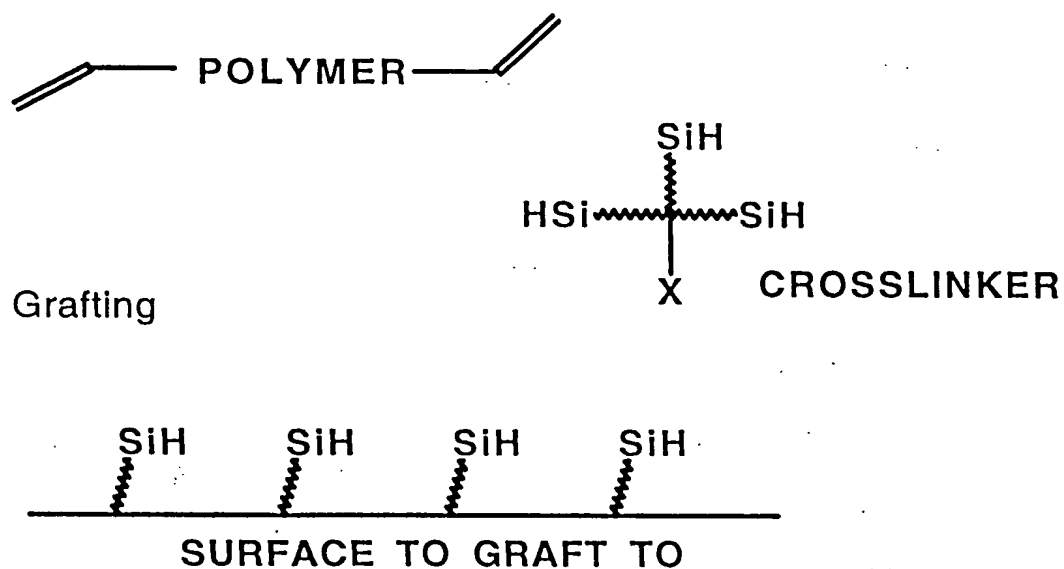


FIG. 16

FIG. 18

